

American Falls Water Quality Update September 2006 Sampling Event



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The American Falls monitoring project began as a result of high nitrate concentrations detected in ground water at dairy and domestic wells northeast of American Falls, Idaho. Eleven wells were sampled in September 2006 for a variety of constituents, with a focus on nitrate (see map below). Well logs show alternating layers of sand and clay overlying gravel and/or sandstone with static water levels ranging from approximately 25-65 feet below ground level (BGL). Domestic wells are generally completed open hole in the gravel or sandstone with casing depths at approximately 200-300 feet BGL. Ground water flow direction is approximately to the west or southwest.

In September 2006, two wells exceeded the EPA drinking water standard of 10 mg/L for nitrate; the maximum nitrate concentration in a well was 16 mg/L (see table below). Fecal coliform was not detected in any wells during the sampling event.

Nitrate concentration distribution and statistics in all wells sampled, Sept. 2006

Concentration	September 2006
Range (mg/L)	# wells (% wells)
0.0 to 5.0	6 (55%)
5.0 to 10.0	3 (27%)
> 10.0	2 (18%)
Total	11 (100%)

Nitrate Concentration Statistics September 2006	
Mean	5.5 mg/L
Median	3.3 mg/L
Maximum	16 mg/L



American Falls Nitrate Concentrations, September 2006

